

**REMARKS**

The present amendment to the specification provides updated continuation data. Also added are new claims 17-29 to replace originally filed claims 1-16. Support for the new claims can be found throughout the specification, including examples, figures, and claims as originally filed. The following are examples of specific support for the newly added claims:

Claim 17 steps (a) and (b) recite the hybridization of tagged primers with sample fragments to produce primer-extended sequencing fragments. Support for this recitation can be found on page 6 line 29 to page 7 line 4, page 8 lines 7-24, and page 19 lines 16-27. Steps (c) and (d) recite the hybridization of sequencing fragments to an array of immobilized tag probes and determination of oligonucleotide sequence based on hybridization pattern. Support for this recitation can be found on page 7 lines 18-30.

Claim 18 recites the use of at least two unique tagged primers for each sample fragment. It finds support on page 10 lines 32-34. The sentence “[I]ndividual clones are selected from each of at least two such libraries and are combined” clearly indicates that there are at least two unique tagged primers used for each sample fragment.

Claim 19 finds support on page 35 lines 1-5.

Claim 20 finds support on page 35 lines 14-20 and page 43 lines 3-9.

Claim 21 finds support on page 34 lines 26-32 and page 43 lines 5-9.

Claim 22 finds support on page 26 lines 12-18 and page 43 lines 5-9.

Claim 23 finds support on page 11 lines 7-10 and in original claim 6.

Claim 24 finds support in original claim 7.

Claim 25 finds support in original claim 8.

Claim 26 finds support in original claim 9.

Claim 27 finds support on page 11 lines 10-12 and in original claim 10.

Claim 28 finds support on page 27 lines 2-3 and page 43 lines 19-23.

Claim 29 is directed to a polynucleotide mixture comprising a plurality of primer-tag-primer polynucleotides that have three primer sequences. It finds support in original claim 14 for the recitation of two primer sequences flanking the identifier tag, each of the primers (i.e., the first primer or the third primer) identical among all primer-tag-primer polynucleotides. The recitation of an additional primer (i.e., the second primer) finds support on page 19 line 31 and page 20 lines 11-13, where it indicates an “optional linker region” maybe present at the 3’-side of the identifier tag and the 5’-side of a primer, as illustrated in Fig. 1A and 1B. Such linker is further described as possibly a polynucleotide (page 20 lines 1-2), i.e., possibly a primer sequence. The specification therefore fully supports the recitation of an additional primer in the primer-tag-primer polynucleotide of original claim 14.

The present amendments thus introduce no new matter.

**CONCLUSION**

In view of the foregoing, Applicants believe all new claims are properly supported by the present specification and their entry is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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